



# Non-Fatal Drug Overdose in Tennessee, 2012-2016

**Tennessee Department of Health  
Office of Informatics and Analytics**

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## Introduction and purpose

The purpose of this report is to describe nonfatal drug overdoses in the State of Tennessee from 2012 to 2016, with an emphasis on providing useful data to stakeholders of TDH at the regional and county levels. Data presented here derive from the Tennessee Hospital Discharge Data System (HDDS). The HDDS contains billing codes from discharges at hospitals statewide that includes information on inpatient hospitalizations and outpatient visits. These billing codes are based on the International Classification of Diseases, Ninth and Tenth Revisions, Clinical Modification (ICD-9-CM and ICD-10-CM) and provide a standardized method for identification of drug overdoses.

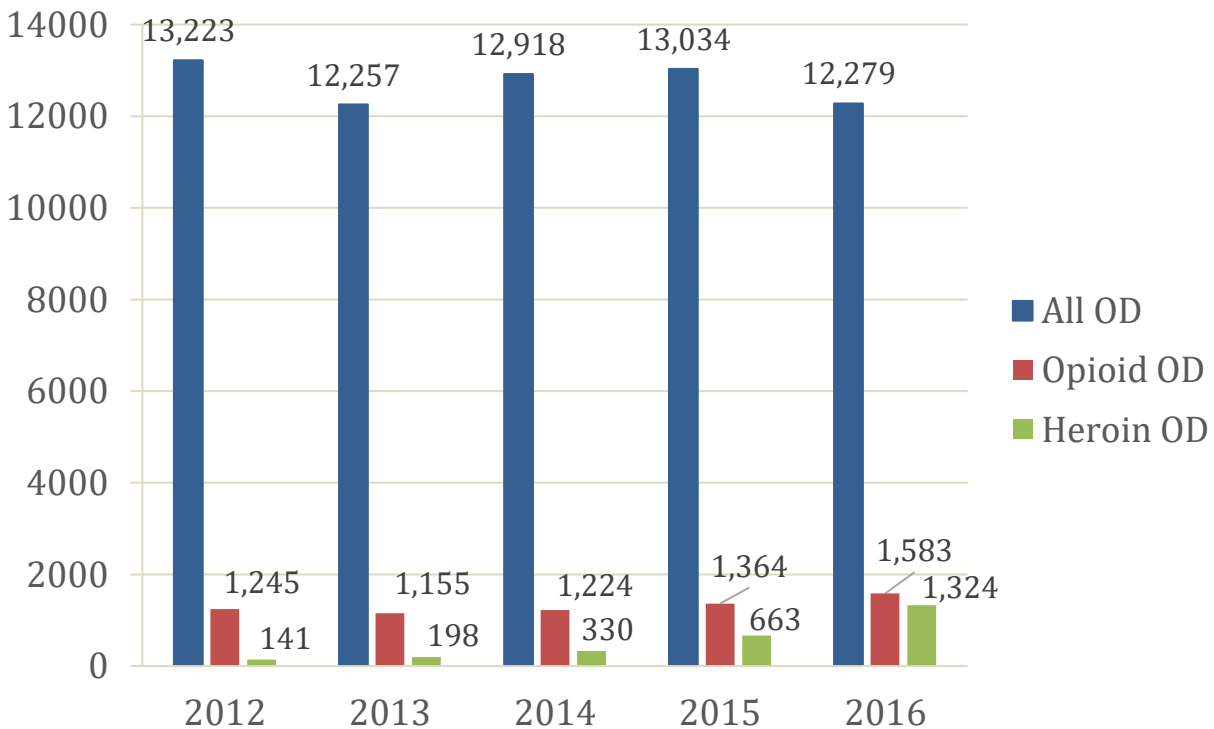
## Definitions

- Drug overdose (fatal and nonfatal)
  - A drug overdose is classified medically as a “drug poisoning.” An overdose may be fatal or nonfatal, and in Tennessee in 2016, approximately 11 nonfatal overdoses hospital visits occurred for every identified fatal overdose.
- Principal diagnosis
  - To be classified as a drug overdose, the principal diagnosis on a discharge record may be designated as a drug poisoning. The principal diagnosis is defined as the condition responsible for the admission of the patient for care.
- External cause of injury
  - External cause of injury codes (or e-codes) describe the environmental events, circumstances, and conditions as the cause of injury, poisoning, or other adverse effects. When the principal diagnosis does not indicate drug poisoning, but the e-codes suggest a poisoning, a discharge record will be classified as a drug overdose. Note that e-codes are no longer used as of October 1<sup>st</sup>, 2015.
- ICD-9-CM and ICD-10-CM
  - The International Classification of Diseases (ICD) is a widely used method for reporting and classifying and reporting diseases and other health conditions. The National Center for Health Statistics creates a clinical modification for reporting morbidity statistics. From 2012 through the third quarter of 2015, the TN HDDS used the ninth revision of these codes (ICD-9-CM). Beginning October 1, 2015, hospitals began reporting using the tenth revision (ICD-10-CM). Classifying drug poisonings using ICD-9-CM codes requires standard diagnosis codes and external cause of injury codes (e-codes). ICD-10-CM codes no longer require e-codes. **The switch from ICD-9-CM to ICD-10-CM involved substantial changes to the way overdoses are defined and counted. Therefore, apparent trends from data gathered before and after the coding change should be interpreted with caution.**
  - It is important to note that ICD codes contain limited information on the particular drug that caused the poisoning. Poisoning by certain drugs like heroin is distinguished by unique codes while poisoning from other drugs like fentanyl cannot be determined. Because of this limitation, drug overdose categories for opioids are typically limited to two categories: overdose involving opioids excluding heroin and overdose involving heroin.
- All drug overdose, opioid overdose, and heroin overdose
  - In this report, all drug overdose or “All OD” refers to all drug poisonings, regardless of type of drug involved. Opioid overdose or “Opioid OD” refers to all poisonings caused by opioid drugs *excluding* heroin. Heroin overdose or “Heroin OD” refers to all poisonings cause by heroin.
- Inpatient Hospitalization and Outpatient Visits
  - Hospital discharge data are often classified according to type of hospital stay, regardless of how the patient was admitted to the hospital. Inpatient hospitalizations make up less than 20% of all discharges and over half of these stays involved a trip to the ER. Among outpatient visits, over 70% involved a trip to the ER.

## State-level overview 2012 – 2016

Outpatient visits resulting from drug overdose caused by all drug types have fluctuated, first decreasing from 2012 to 2013, increasing from 2013 to 2015 and decreasing in 2016<sup>1</sup>. Opioid overdose outpatient visits have increased every year since 2013, reaching a high of 1,583 in 2016. Heroin overdose has consistently increased from 2012 through 2016 and at a faster rate than other opioids, reaching a high of 1,324 in 2016. If current trends hold, heroin outpatient visits are likely to outnumber other opioid outpatient visits in 2017.

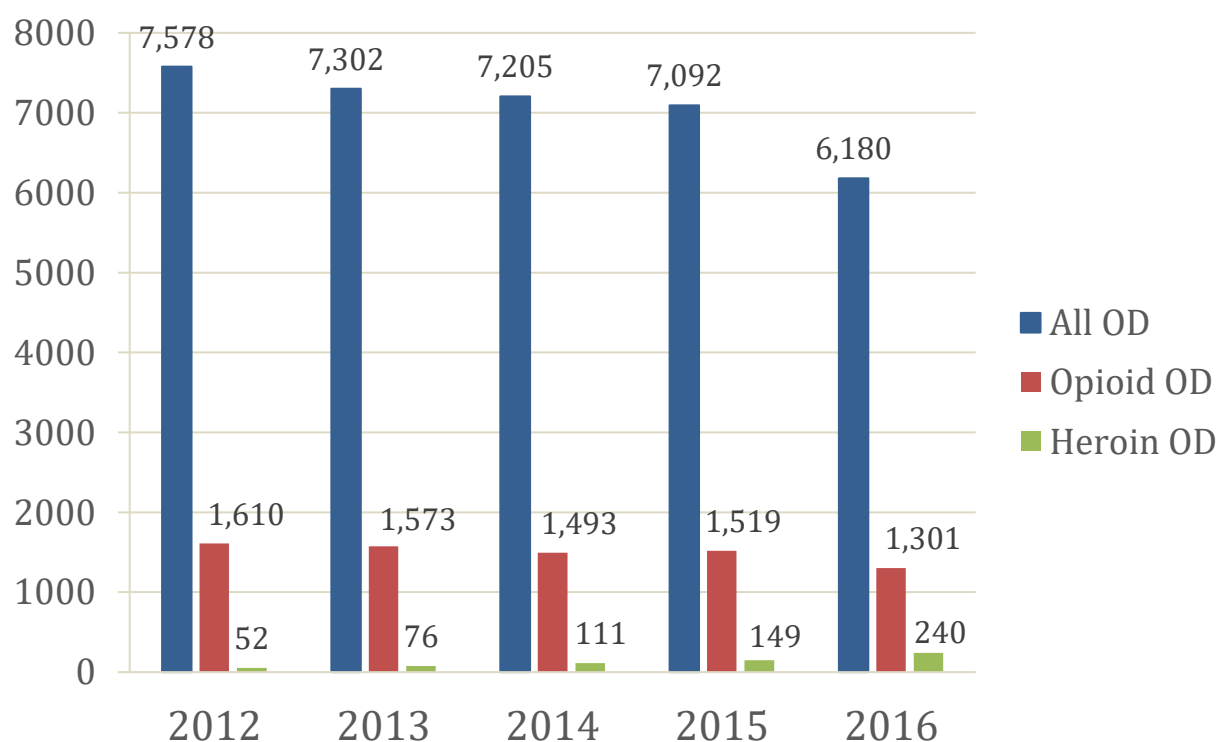
### Drug Overdose Outpatient Visits in TN 2012-2016



<sup>1</sup> It is important to note that this apparent decrease may be associated with the change in diagnosis coding from ICD-9-CM to ICD-10-CM. See definitions section for more information.

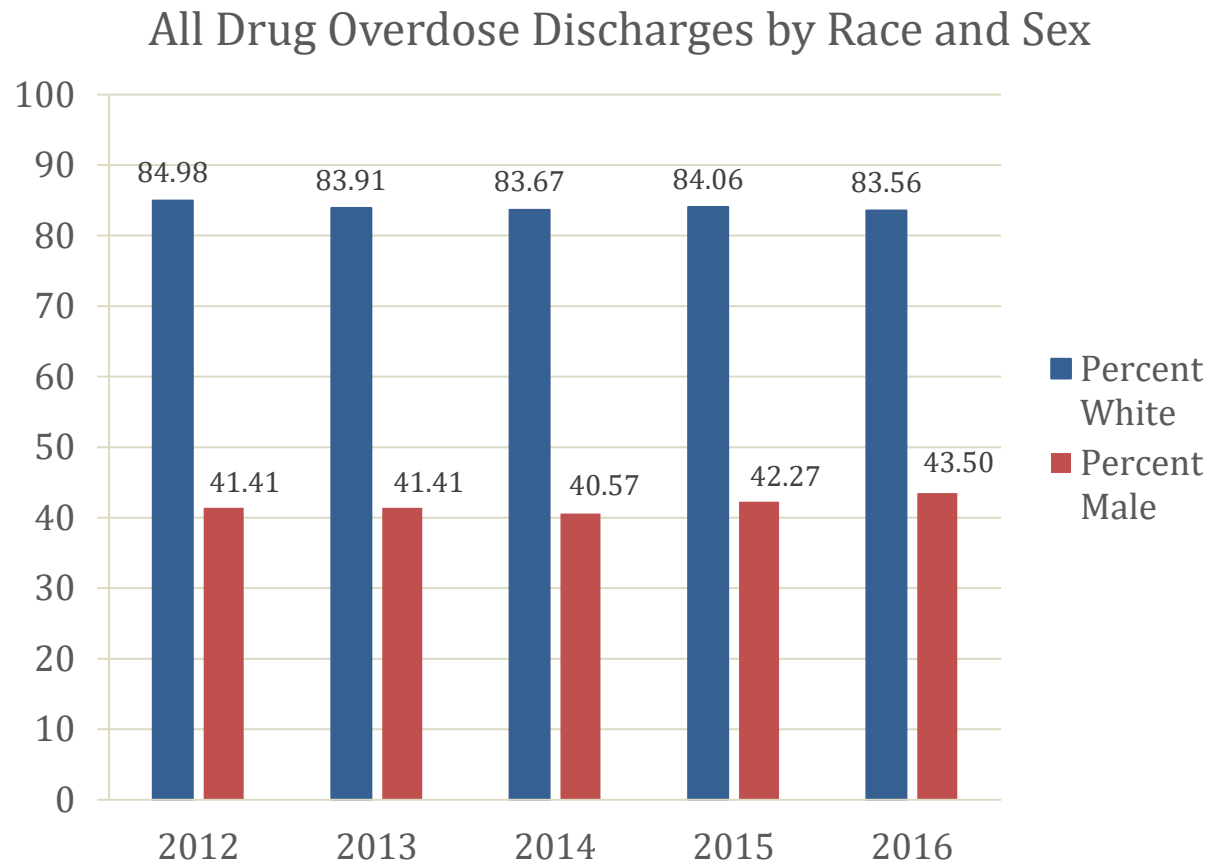
Inpatient hospitalizations resulting from all drug overdoses have generally declined from 2012 to 2016<sup>2</sup>. Inpatient stays caused by opioid overdose have declined slowly as well. Alternately, inpatient stays due to heroin overdose have steadily increased during this time period, reaching a high of 240 in 2016.

### Drug Overdose Inpatient Stays in TN 2012-2016

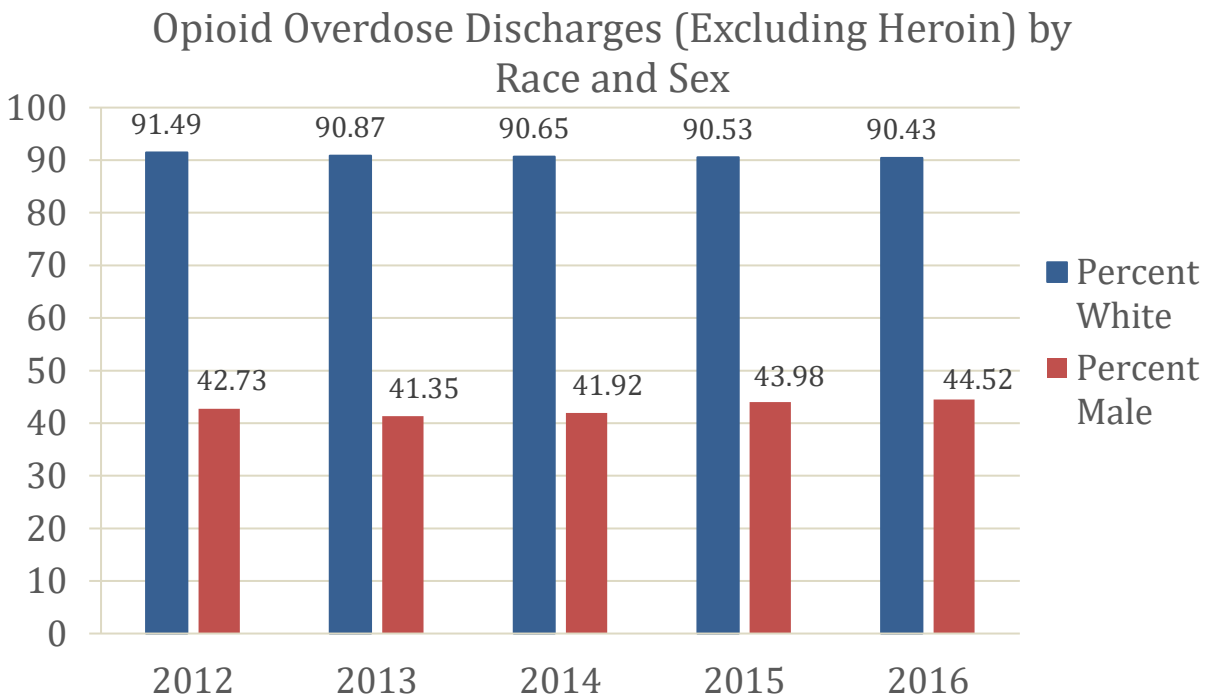


<sup>2</sup> It is important to note that this apparent decrease may be associated with the change in diagnosis coding from ICD-9-CM to ICD-10-CM. See definitions section for more information.

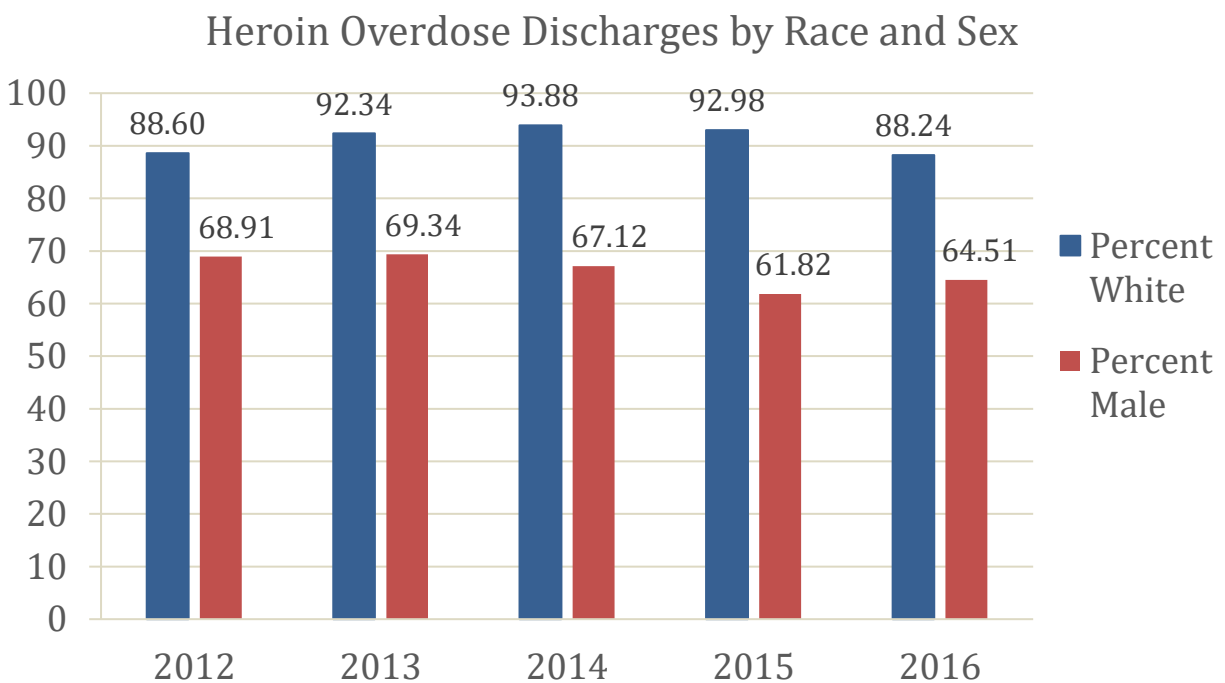
The following three figures provide breakdowns of *all hospital discharges* (inpatient and outpatient) by race and sex for each category of drug overdose. Tennesseans who go to the hospital as a result of any drug overdose are most likely to be white and female.



Tennesseans who go to the hospital as a result of opioid overdoses (excluding heroin) are more likely to be white and female.



Tennesseans who go to the hospital as a result of heroin overdose are much more likely to be white and to be male.



## County Level Data 2012 - 2016

The following pages include count data on outpatient visits and inpatient hospitalizations due to drug overdose for the years 2012 to 2016 by a subset of drug types.

Categories of drug overdose are designated by the CDC for the Prevention for States program as follows:

	<u>Criteria</u>
Primary Inclusion/Exclusion Criteria:	Only Tennessee Residents. Excludes patients discharged as dead/deceased. Limited to non-federal acute care-affiliated facilities. Excludes VA and other federal hospitals, rehabilitation centers, and psychiatric hospitals.
Outpatient Visit Inclusion Criteria:	Flagged as an outpatient record.
Inpatient Hospitalization Inclusion Criteria:	Flagged as an inpatient record.
All Drug Overdose Inclusion Criteria:	<p><i>2012 - Q3 2015:</i> Principal Diagnosis ICD-9-CM code falls in the range 960-979 (Poisoning by drugs, medicinal and biological substances)</p> <p>OR other diagnostic code or e-code fields contain an e-code in the following ranges: E850-E858 (Accidental poisoning by drugs, medicinal substances, and biologicals); E950.0-E950.5 (Suicide and self-inflicted poisoning by solid or liquid substances); E962.0 (Assault by drugs and medicinal substances); E980.0-E980.5 (Poisoning by solid or liquid substances undetermined whether accidentally or purposefully inflicted)</p> <p><i>Q4 2015 and after:</i> First 3 characters of Principal Diagnosis ICD-10-CM code falls in the range T36-T50 (Poisoning by drugs, medicaments, and biological substances)</p> <p>AND the intent is accidental/unintentional, intentional self-harm, assault, or undetermined intent, <i>not</i> an adverse effect or underdosing (5<sup>th</sup> or 6<sup>th</sup> character is 1, 2, 3, or 4)</p> <p>AND it is the initial or a subsequent encounter (7<sup>th</sup> character is A, D, or blank)</p>
Opioid Overdose Inclusion Criteria:	<p><i>2012 - Q3 2015:</i> Principal Diagnosis ICD-9-CM code is 965.00 (Poisoning by opium) or 965.02 (Poisoning by methadone) or 965.09 (Poisoning by other opiates and related narcotics)</p> <p>OR other diagnostic code or e-code fields contain e-code E850.1 (Accidental poisoning by methadone) or E850.2 (Accidental poisoning by other opiates and related narcotics)</p>

	Criteria
Opioid Overdose Inclusion Criteria (cont.):	<p><i>Q4 2015 and after:</i>  First 5 characters of Principal Diagnosis ICD-10-CM code are either:  T40.0X (Poisoning by opium),  T40.2X (Poisoning by other opioids),  T40.3X (Poisoning by methadone),  T40.4X (Poisoning by synthetic narcotics),  T40.60 (Poisoning by unspecified narcotics),  or T40.69 (Poisoning by other narcotics)</p> <p>AND the intent is accidental/unintentional, intentional self-harm, assault, or undetermined intent, <i>not</i> an adverse effect or underdosing (6<sup>th</sup> character is 1, 2, 3, or 4)</p> <p>AND it is the initial or a subsequent encounter (7<sup>th</sup> character is A, D, or blank)</p>
Heroin Overdose Inclusion Criteria:	<p><i>2012 - Q3 2015:</i>  Principal Diagnosis ICD-9-CM code is 965.01 (Poisoning by heroin)</p> <p>OR other diagnostic code or e-code fields contain e-code  E850.0 (Accidental poisoning by heroin)</p> <p><i>Q4 2015 and after:</i>  First 5 characters of Principal Diagnosis ICD-10-CM code is  T40.1X (Poisoning by heroin)</p> <p>AND the intent is accidental/unintentional, intentional self-harm, assault, or undetermined intent, <i>not</i> an adverse effect or underdosing (6<sup>th</sup> character is 1, 2, 3, or 4)</p> <p>AND it is the initial or a subsequent encounter (7<sup>th</sup> character is A, D, or blank)</p>



## 2012 Drug Overdose Hospital Discharges by County

	All drug overdose inpatient hospitalizations	Inpatient hospitalizations involving all opioid overdose excluding heroin	Inpatient hospitalizations involving heroin overdose	All drug overdose outpatient visits	Outpatient visits involving all opioid overdose excluding heroin	Outpatient visits involving heroin overdose
Anderson	103	25	0	163	11	0
Bedford	63	4	0	77	9	0
Benton	22	11	0	58	6	0
Bledsoe	9	0	0	25	6	0
Blount	119	33	0	228	31	1
Bradley	173	33	0	278	33	0
Campbell	76	32	0	108	7	1
Cannon	30	6	0	47	10	1
Carroll	30	8	0	82	6	0
Carter	100	18	0	130	8	0
Cheatham	55	11	1	91	10	3
Chester	17	2	0	21	2	0
Claiborne	47	18	0	103	20	1
Clay	18	7	0	11	1	0
Cocke	60	20	0	107	17	0
Coffee	94	21	0	171	23	0
Crockett	10	1	0	26	1	0
Cumberland	63	17	0	152	17	0
Davidson	811	161	13	1149	96	31
Decatur	16	2	0	38	3	0
DeKalb	45	8	0	77	9	2
Dickson	67	12	0	118	12	1
Dyer	68	9	0	104	8	1
Fayette	38	9	0	54	3	0
Fentress	45	17	0	77	8	0
Franklin	63	13	0	81	11	0
Gibson	39	9	0	127	12	0
Giles	62	15	0	88	12	0
Grainger	31	10	0	41	5	0
Greene	107	38	0	143	14	0
Grundy	34	8	0	34	15	0
Hamblen	103	29	0	161	25	1
Hamilton	400	75	0	516	35	1
Hancock	15	3	0	22	4	0
Hardeman	23	4	1	57	4	1
Hardin	33	9	0	87	9	0

## 2012 Drug Overdose Hospital Discharges by County

	All drug overdose inpatient hospitalizations	Inpatient hospitalizations involving all opioid overdose excluding heroin	Inpatient hospitalizations involving heroin overdose	All drug overdose outpatient visits	Outpatient visits involving all opioid overdose excluding heroin	Outpatient visits involving heroin overdose
Hawkins	110	26	0	146	13	0
Haywood	15	2	0	42	0	0
Henderson	29	6	0	86	7	0
Henry	33	10	0	77	4	0
Hickman	50	13	0	81	14	1
Houston	10	2	0	28	1	0
Humphreys	20	2	0	41	2	0
Jackson	33	13	0	35	6	0
Jefferson	77	21	0	85	11	0
Johnson	17	3	0	42	4	0
Knox	474	121	2	918	97	14
Lake	1	0	0	10	0	1
Lauderdale	17	4	1	96	7	1
Lawrence	60	16	0	131	15	0
Lewis	14	4	0	33	3	0
Lincoln	15	2	0	74	6	0
Loudon	50	14	0	95	13	0
McMinn	55	10	0	184	18	0
McNairy	33	9	1	102	15	0
Macon	46	14	0	71	5	0
Madison	119	29	1	182	19	3
Marion	41	8	0	57	7	0
Marshall	30	4	0	80	7	0
Maury	81	10	0	227	16	2
Meigs	16	6	0	32	2	0
Monroe	45	11	1	129	13	0
Montgomery	172	23	0	360	29	1
Moore	5	0	0	6	0	0
Morgan	37	8	0	70	10	0
Obion	24	4	0	58	8	0
Overton	50	19	0	67	8	0
Perry	14	3	0	26	0	0
Pickett	5	3	0	7	1	0
Polk	28	11	0	41	3	0
Putnam	101	29	0	178	15	0
Rhea	23	5	0	70	5	2

### 2012 Drug Overdose Hospital Discharges by County

	All drug overdose inpatient hospitalizations	Inpatient hospitalizations involving all opioid overdose excluding heroin	Inpatient hospitalizations involving heroin overdose	All drug overdose outpatient visits	Outpatient visits involving all opioid overdose excluding heroin	Outpatient visits involving heroin overdose
Roane	125	40	0	163	25	3
Robertson	62	21	0	182	22	1
Rutherford	245	42	1	553	38	1
Scott	33	10	0	44	4	0
Sequatchie	18	8	0	32	3	0
Sevier	119	25	0	211	21	0
Shelby	685	65	22	1191	76	47
Smith	25	6	0	40	2	0
Stewart	18	1	1	22	3	1
Sullivan	250	37	1	390	30	1
Sumner	246	51	2	345	28	6
Tipton	50	8	0	151	17	2
Trousdale	7	1	0	23	2	0
Unicoi	35	5	0	45	2	0
Union	22	6	0	52	12	0
Van Buren	8	1	0	18	1	0
Warren	78	17	0	114	10	0
Washington	179	36	0	171	10	2
Wayne	16	3	0	55	7	0
Weakley	32	5	0	62	4	0
White	33	9	0	51	5	0
Williamson	111	21	3	304	22	5
Wilson	142	29	1	182	14	2
Unknown	0	0	0	3	0	0
Tennessee	7578	1610	52	13223	1245	141

### 2013 Drug Overdose Hospital Discharges by County

	All drug overdose inpatient hospitalizations	Inpatient hospitalizations involving all opioid overdose excluding heroin	Inpatient hospitalizations involving heroin overdose	All drug overdose outpatient visits	Outpatient visits involving all opioid overdose excluding heroin	Outpatient visits involving heroin overdose
Anderson	108	33	0	172	18	0
Bedford	68	11	1	111	6	0
Benton	28	8	0	56	10	0
Bledsoe	14	6	0	42	1	0
Blount	115	31	0	235	20	1
Bradley	159	30	1	235	21	0
Campbell	68	19	0	90	11	0
Cannon	16	6	0	41	9	0
Carroll	21	4	0	80	7	0
Carter	101	12	0	138	8	0
Cheatham	64	15	0	117	19	5
Chester	16	5	0	29	2	0
Claiborne	60	28	0	97	20	0
Clay	17	5	0	5	1	0
Cocke	57	20	0	85	14	0
Coffee	95	17	0	138	19	0
Crockett	15	3	0	34	2	0
Cumberland	63	15	0	104	19	0
Davidson	809	139	16	1121	114	36
Decatur	9	3	0	25	2	0
DeKalb	45	10	0	63	7	0
Dickson	87	26	0	116	13	0
Dyer	54	9	0	101	7	0
Fayette	31	6	1	49	1	3
Fentress	48	18	0	49	7	0
Franklin	66	16	0	92	12	0
Gibson	34	8	0	111	8	0
Giles	50	23	0	59	10	0
Grainger	34	9	0	27	5	0
Greene	113	26	1	158	14	0
Grundy	35	12	0	35	5	0
Hamblen	78	34	1	132	16	0
Hamilton	375	73	6	500	39	3
Hancock	10	2	1	23	3	1
Hardeman	19	4	0	74	8	1
Hardin	19	6	0	76	11	0

### 2013 Drug Overdose Hospital Discharges by County

	All drug overdose inpatient hospitalizations	Inpatient hospitalizations involving all opioid overdose excluding heroin	Inpatient hospitalizations involving heroin overdose	All drug overdose outpatient visits	Outpatient visits involving all opioid overdose excluding heroin	Outpatient visits involving heroin overdose
Hawkins	99	25	0	125	20	0
Haywood	14	1	0	32	2	0
Henderson	23	8	0	85	16	0
Henry	36	8	0	77	6	0
Hickman	28	2	0	63	8	1
Houston	12	3	0	20	0	0
Humphreys	14	7	0	21	6	0
Jackson	26	15	0	40	6	0
Jefferson	71	23	0	89	11	0
Johnson	14	1	0	34	3	0
Knox	430	107	3	856	66	15
Lake	12	2	0	8	0	0
Lauderdale	19	8	1	56	9	0
Lawrence	36	7	0	120	14	0
Lewis	19	2	0	25	4	0
Lincoln	18	4	0	56	4	0
Loudon	46	8	0	74	6	0
McMinn	61	13	0	143	11	0
McNairy	19	7	0	69	2	0
Macon	43	13	0	52	7	0
Madison	89	9	0	169	15	1
Marion	37	7	0	47	8	0
Marshall	35	5	0	104	11	0
Maury	79	16	0	179	11	2
Meigs	15	6	0	23	3	0
Monroe	47	10	0	111	4	0
Montgomery	168	32	0	311	19	3
Moore	4	0	0	7	0	0
Morgan	45	12	0	52	8	0
Obion	18	7	0	61	6	0
Overton	44	12	0	55	10	0
Perry	22	7	0	23	1	0
Pickett	2	0	0	11	2	0
Polk	24	3	0	38	6	0
Putnam	95	23	0	175	24	0
Rhea	40	15	0	70	5	1

### 2013 Drug Overdose Hospital Discharges by County

	<b>All drug overdose inpatient hospitalizations</b>	<b>Inpatient hospitalizations involving all opioid overdose excluding heroin</b>	<b>Inpatient hospitalizations involving heroin overdose</b>	<b>All drug overdose outpatient visits</b>	<b>Outpatient visits involving all opioid overdose excluding heroin</b>	<b>Outpatient visits involving heroin overdose</b>
Roane	99	33	0	140	22	0
Robertson	68	12	0	154	16	3
Rutherford	230	37	0	506	31	5
Scott	31	13	0	45	5	0
Sequatchie	30	10	0	24	4	0
Sevier	79	15	0	167	18	0
Shelby	765	90	33	1287	75	92
Smith	23	5	0	58	7	1
Stewart	15	2	0	27	3	0
Sullivan	220	36	1	330	19	0
Sumner	231	56	1	303	23	7
Tipton	74	13	2	121	6	4
Trousdale	23	5	0	20	1	0
Unicoi	15	4	0	33	5	0
Union	19	7	0	39	4	0
Van Buren	13	2	0	16	1	0
Warren	75	21	0	74	8	0
Washington	177	33	1	184	16	1
Wayne	18	3	0	52	7	0
Weakley	35	7	0	70	12	0
White	31	8	0	56	12	0
Williamson	102	20	4	263	14	7
Wilson	121	20	2	185	23	4
Unknown	3	1	0	2	0	1
Tennessee	7302	1573	76	12257	1155	198

### 2014 Drug Overdose Hospital Discharges by County

	All drug overdose inpatient hospitalizations	Inpatient hospitalizations involving all opioid overdose excluding heroin	Inpatient hospitalizations involving heroin overdose	All drug overdose outpatient visits	Outpatient visits involving all opioid overdose excluding heroin	Outpatient visits involving heroin overdose
Anderson	121	28	2	190	20	3
Bedford	61	10	0	102	17	0
Benton	32	13	0	79	5	0
Bledsoe	9	1	0	25	1	0
Blount	133	39	1	233	19	2
Bradley	134	32	0	240	29	3
Campbell	84	22	0	91	12	0
Cannon	27	7	0	32	4	0
Carroll	26	3	0	78	6	0
Carter	100	23	0	111	11	0
Cheatham	55	12	0	90	12	5
Chester	7	3	0	29	4	0
Claiborne	48	15	0	79	16	0
Clay	15	1	0	18	4	0
Cocke	55	24	0	101	15	0
Coffee	98	18	0	146	9	0
Crockett	10	2	0	44	5	0
Cumberland	90	16	0	133	15	0
Davidson	802	140	30	1283	117	97
Decatur	16	6	0	29	7	0
DeKalb	32	7	1	65	7	0
Dickson	91	17	2	111	8	5
Dyer	53	7	0	139	11	0
Fayette	30	6	5	54	3	3
Fentress	32	10	0	51	4	0
Franklin	69	8	0	72	6	0
Gibson	40	7	0	117	11	0
Giles	48	21	0	53	9	1
Grainger	36	9	0	50	1	0
Greene	91	23	1	188	20	1
Grundy	25	7	0	41	5	0
Hamblen	84	22	0	118	15	0
Hamilton	368	87	9	538	44	29
Hancock	13	3	0	24	6	0
Hardeman	14	1	0	59	8	1
Hardin	16	5	0	86	12	0

### 2014 Drug Overdose Hospital Discharges by County

	All drug overdose inpatient hospitalizations	Inpatient hospitalizations involving all opioid overdose excluding heroin	Inpatient hospitalizations involving heroin overdose	All drug overdose outpatient visits	Outpatient visits involving all opioid overdose excluding heroin	Outpatient visits involving heroin overdose
Hawkins	68	20	0	127	10	0
Haywood	8	1	0	24	2	0
Henderson	31	5	0	81	6	0
Henry	39	8	0	75	8	0
Hickman	47	16	0	85	11	1
Houston	3	0	0	23	3	0
Humphreys	20	4	0	36	3	0
Jackson	27	3	0	29	2	0
Jefferson	79	18	0	94	7	1
Johnson	22	4	0	37	0	0
Knox	424	110	6	912	78	20
Lake	7	4	0	21	4	0
Lauderdale	17	2	0	72	11	0
Lawrence	68	12	0	113	7	0
Lewis	22	4	0	31	2	0
Lincoln	13	2	0	61	9	0
Loudon	55	15	0	95	16	1
McMinn	49	8	0	183	18	1
McNairy	10	3	0	76	6	0
Macon	29	5	0	66	8	1
Madison	81	12	6	178	11	5
Marion	29	6	0	70	8	0
Marshall	34	6	0	78	9	0
Maury	110	18	1	202	12	3
Meigs	11	2	0	29	4	0
Monroe	51	13	1	88	11	0
Montgomery	179	25	2	357	30	0
Moore	4	2	0	9	0	0
Morgan	41	12	0	39	7	0
Obion	17	4	0	82	9	0
Overton	37	10	0	36	6	0
Perry	20	4	0	34	0	0
Pickett	1	0	0	6	1	0
Polk	26	6	0	39	5	0
Putnam	92	16	0	167	24	0
Rhea	33	15	0	60	9	0



### 2014 Drug Overdose Hospital Discharges by County

	<b>All drug overdose inpatient hospitalizations</b>	<b>Inpatient hospitalizations involving all opioid overdose excluding heroin</b>	<b>Inpatient hospitalizations involving heroin overdose</b>	<b>All drug overdose outpatient visits</b>	<b>Outpatient visits involving all opioid overdose excluding heroin</b>	<b>Outpatient visits involving heroin overdose</b>
Roane	81	31	1	132	13	2
Robertson	55	18	1	151	12	3
Rutherford	318	61	4	541	60	10
Scott	32	5	0	96	6	0
Sequatchie	28	3	0	23	2	0
Sevier	105	21	1	163	12	4
Shelby	737	88	26	1314	89	96
Smith	27	7	0	39	8	1
Stewart	7	3	0	34	5	1
Sullivan	212	46	0	312	33	0
Sumner	209	43	4	333	26	9
Tipton	45	12	4	136	12	7
Trousdale	10	4	0	21	0	0
Unicoi	29	9	0	24	1	0
Union	15	3	0	30	3	0
Van Buren	9	1	0	11	5	0
Warren	57	14	1	97	11	0
Washington	172	23	0	161	15	0
Wayne	17	5	0	59	4	0
Weakley	35	8	0	86	11	0
White	26	5	0	67	6	0
Williamson	109	10	1	270	21	7
Wilson	96	21	1	200	14	7
Unknown	5	2	0	4	0	0
Tennessee	7205	1493	111	12918	1224	330

## 2015 Drug Overdose Hospital Discharges by County

	All drug overdose inpatient hospitalizations	Inpatient hospitalizations involving all opioid overdose excluding heroin	Inpatient hospitalizations involving heroin overdose	All drug overdose outpatient visits	Outpatient visits involving all opioid overdose excluding heroin	Outpatient visits involving heroin overdose
Anderson	99	30	3	190	28	20
Bedford	58	11	2	100	8	0
Benton	27	4	0	63	7	0
Bledsoe	18	3	0	13	1	0
Blount	139	37	2	264	21	18
Bradley	140	21	0	211	25	4
Campbell	71	24	0	79	7	0
Cannon	24	6	0	42	14	2
Carroll	33	7	1	88	6	0
Carter	77	16	0	124	12	0
Cheatham	53	8	2	120	25	11
Chester	14	2	0	31	1	0
Claiborne	38	14	0	74	14	0
Clay	7	0	0	10	0	0
Cocke	52	21	1	91	10	0
Coffee	86	25	1	147	10	3
Crockett	15	3	0	28	3	0
Cumberland	79	16	0	101	16	0
Davidson	764	133	34	1258	138	137
Decatur	12	2	0	33	0	0
DeKalb	41	13	0	62	14	1
Dickson	84	28	1	133	14	8
Dyer	54	10	0	92	6	0
Fayette	30	4	2	55	4	3
Fentress	20	6	0	37	4	0
Franklin	88	16	0	76	8	2
Gibson	47	10	0	129	7	2
Giles	40	10	0	66	6	1
Grainger	20	3	0	33	6	0
Greene	109	25	0	147	17	0
Grundy	51	18	0	45	15	0
Hamblen	77	17	0	118	19	0
Hamilton	361	82	5	522	51	39
Hancock	15	4	0	20	4	0
Hardeman	21	5	0	45	4	1
Hardin	20	6	0	83	9	1

## 2015 Drug Overdose Hospital Discharges by County

	All drug overdose inpatient hospitalizations	Inpatient hospitalizations involving all opioid overdose excluding heroin	Inpatient hospitalizations involving heroin overdose	All drug overdose outpatient visits	Outpatient visits involving all opioid overdose excluding heroin	Outpatient visits involving heroin overdose
Hawkins	69	20	0	130	16	1
Haywood	4	4	0	17	2	0
Henderson	24	8	0	89	16	0
Henry	33	4	0	89	15	0
Hickman	51	15	0	59	4	2
Houston	8	4	0	19	3	0
Humphreys	21	6	0	57	8	0
Jackson	18	8	0	32	5	0
Jefferson	58	9	1	97	11	3
Johnson	18	1	1	22	1	0
Knox	447	115	11	961	104	87
Lake	9	4	0	20	4	1
Lauderdale	22	4	1	69	9	0
Lawrence	28	12	0	116	8	0
Lewis	8	1	0	14	2	0
Lincoln	21	3	0	40	5	0
Loudon	53	13	1	95	17	5
McMinn	46	7	0	122	7	0
McNairy	23	5	0	72	10	0
Macon	44	7	0	54	6	1
Madison	86	16	1	188	19	3
Marion	37	7	1	45	7	0
Marshall	37	8	0	80	9	1
Maury	99	25	4	188	15	6
Meigs	20	2	0	20	1	0
Monroe	39	11	1	114	12	2
Montgomery	176	31	2	294	24	5
Moore	6	2	0	9	0	0
Morgan	35	12	0	45	10	0
Obion	33	5	0	79	5	0
Overton	32	9	0	54	8	0
Perry	14	3	0	29	0	1
Pickett	2	1	0	8	0	0
Polk	22	5	0	27	3	0
Putnam	98	22	1	164	16	0
Rhea	29	5	0	63	9	0

### 2015 Drug Overdose Hospital Discharges by County

	<b>All drug overdose inpatient hospitalizations</b>	<b>Inpatient hospitalizations involving all opioid overdose excluding heroin</b>	<b>Inpatient hospitalizations involving heroin overdose</b>	<b>All drug overdose outpatient visits</b>	<b>Outpatient visits involving all opioid overdose excluding heroin</b>	<b>Outpatient visits involving heroin overdose</b>
Roane	100	25	2	133	12	2
Robertson	55	9	0	166	20	8
Rutherford	322	72	9	621	66	20
Scott	25	6	0	75	3	1
Sequatchie	23	6	0	15	1	0
Sevier	99	24	1	187	21	8
Shelby	653	85	42	1477	112	174
Smith	15	7	0	47	9	0
Stewart	18	7	0	35	5	0
Sullivan	187	27	1	370	31	3
Sumner	247	55	6	376	36	29
Tipton	54	9	5	187	23	19
Trousdale	16	4	0	20	1	0
Unicoi	31	9	0	33	4	0
Union	19	9	0	41	7	0
Van Buren	13	5	0	10	1	0
Warren	67	20	0	80	12	0
Washington	185	27	0	163	14	2
Wayne	19	5	0	52	11	1
Weakley	21	3	0	60	4	0
White	30	8	0	54	8	0
Williamson	116	16	3	265	11	10
Wilson	121	27	1	253	27	15
Unknown	2	0	0	3	0	0
Tennessee	7092	1519	149	13034	1364	663

## 2016 Drug Overdose Hospital Discharges by County

	All drug overdose inpatient hospitalizations	Inpatient hospitalizations involving all opioid overdose excluding heroin	Inpatient hospitalizations involving heroin overdose	All drug overdose outpatient visits	Outpatient visits involving all opioid overdose excluding heroin	Outpatient visits involving heroin overdose
Anderson	121	46	2	177	24	22
Bedford	50	7	2	73	20	1
Benton	22	5	0	68	8	0
Bledsoe	19	4	0	18	2	0
Blount	111	34	5	255	42	27
Bradley	103	19	2	192	37	8
Campbell	47	10	0	75	9	3
Cannon	20	7	0	41	13	0
Carroll	40	5	0	76	4	1
Carter	84	12	1	122	16	1
Cheatham	55	15	2	98	23	16
Chester	11	1	0	26	2	1
Claiborne	44	7	0	56	9	4
Clay	3	1	0	14	2	0
Cocke	39	8	0	73	7	4
Coffee	82	24	3	106	18	2
Crockett	14	1	1	29	2	2
Cumberland	60	13	2	79	11	3
Davidson	700	133	60	1222	167	253
Decatur	13	3	0	27	1	0
DeKalb	21	4	1	52	13	2
Dickson	68	16	3	109	15	15
Dyer	31	5	1	93	4	2
Fayette	24	3	0	53	10	10
Fentress	19	3	0	49	6	2
Franklin	52	9	1	62	8	0
Gibson	43	5	0	90	5	1
Giles	23	2	1	49	7	1
Grainger	20	7	0	32	5	0
Greene	101	24	4	170	25	4
Grundy	19	5	1	16	0	0
Hamblen	57	20	2	105	18	3
Hamilton	301	56	12	494	79	54
Hancock	12	2	0	18	2	0
Hardeman	19	5	1	47	2	0
Hardin	22	7	0	67	9	0

## 2016 Drug Overdose Hospital Discharges by County

	All drug overdose inpatient hospitalizations	Inpatient hospitalizations involving all opioid overdose excluding heroin	Inpatient hospitalizations involving heroin overdose	All drug overdose outpatient visits	Outpatient visits involving all opioid overdose excluding heroin	Outpatient visits involving heroin overdose
Hawkins	69	7	0	117	15	1
Haywood	13	2	0	25	1	1
Henderson	21	1	0	64	10	0
Henry	27	8	0	78	8	0
Hickman	49	12	2	47	3	0
Houston	13	5	0	32	5	0
Humphreys	14	1	0	25	1	2
Jackson	12	4	0	18	2	1
Jefferson	39	8	0	97	18	6
Johnson	27	3	1	35	3	1
Knox	451	104	24	935	140	225
Lake	4	1	0	10	1	0
Lauderdale	18	5	0	81	10	0
Lawrence	42	5	0	83	8	0
Lewis	10	3	0	27	1	2
Lincoln	18	5	0	43	3	0
Loudon	42	9	0	82	13	10
McMinn	39	11	0	150	17	0
McNairy	14	3	0	38	1	0
Macon	40	10	0	56	6	0
Madison	88	21	1	168	15	9
Marion	22	5	0	54	7	0
Marshall	34	11	0	88	6	5
Maury	65	15	0	183	27	14
Meigs	11	2	0	35	3	1
Monroe	31	8	1	97	7	7
Montgomery	142	31	4	317	50	5
Moore	4	1	0	6	1	0
Morgan	37	12	0	30	2	1
Obion	20	0	0	67	4	0
Overton	19	5	0	51	8	0
Perry	5	2	0	17	1	3
Pickett	3	1	0	10	0	0
Polk	19	2	0	27	2	0
Putnam	53	12	0	131	16	2
Rhea	41	17	0	65	17	0

### 2016 Drug Overdose Hospital Discharges by County

	<b>All drug overdose inpatient hospitalizations</b>	<b>Inpatient hospitalizations involving all opioid overdose excluding heroin</b>	<b>Inpatient hospitalizations involving heroin overdose</b>	<b>All drug overdose outpatient visits</b>	<b>Outpatient visits involving all opioid overdose excluding heroin</b>	<b>Outpatient visits involving heroin overdose</b>
Roane	80	22	0	155	26	12
Robertson	52	11	1	158	20	12
Rutherford	298	56	12	561	84	63
Scott	22	5	0	39	3	1
Sequatchie	22	5	1	9	2	0
Sevier	111	20	9	144	14	20
Shelby	566	89	42	1608	131	337
Smith	13	5	0	48	11	4
Stewart	11	3	0	15	3	0
Sullivan	191	27	2	293	35	4
Sumner	206	62	10	323	58	38
Tipton	60	11	10	169	16	27
Trousdale	13	6	0	18	2	0
Unicoi	21	2	0	32	2	0
Union	19	9	0	38	3	5
Van Buren	8	3	0	16	4	0
Warren	45	8	0	106	18	0
Washington	170	25	8	151	20	5
Wayne	12	6	0	52	9	1
Weakley	15	3	0	84	8	1
White	19	8	0	66	11	0
Williamson	109	13	1	262	28	20
Wilson	91	22	4	209	18	35
Unknown	0	0	0	1	0	1
Tennessee	6180	1301	240	12279	1583	1324